

ABSTRACT

A dielectric ceramic is obtained by the steps of obtaining a reaction product composed of a barium titanate
5 base composite oxide represented by the general formula $(\text{Ba}_{1-h-i-m}\text{Ca}_h\text{Sr}_i\text{Gd}_m)_k(\text{Ti}_{1-y-j-n}\text{Zr}_y\text{Hf}_j\text{Mg}_n)\text{O}_3$, in which $0.995 \leq k \leq 1.015$, $0 \leq h \leq 0.03$, $0 \leq i \leq 0.03$, $0.015 \leq m \leq 0.035$, $0 \leq y < 0.05$, $0 \leq j < 0.05$, $0 \leq (y+j) < 0.05$, and $0.015 \leq n \leq 0.035$ hold; mixing less than 1.5 moles of Ma (Ba or the like), less than 1.0 mole of Mb (Mn
10 or the like), and 0.5 to 2.0 moles of Mc (Si or the like) with respect to 100 moles of the reaction product; and firing the mixture thus obtained. This dielectric ceramic has superior humidity resistance, satisfies the F characteristic of the JIS standard and the Y5V
15 characteristic of the EIA standard, has a relative dielectric constant of 9,000 or more, and has superior high-temperature reliability.